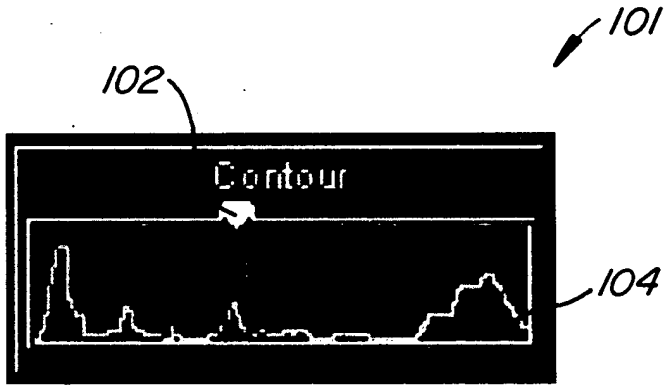

FIG. 1A.

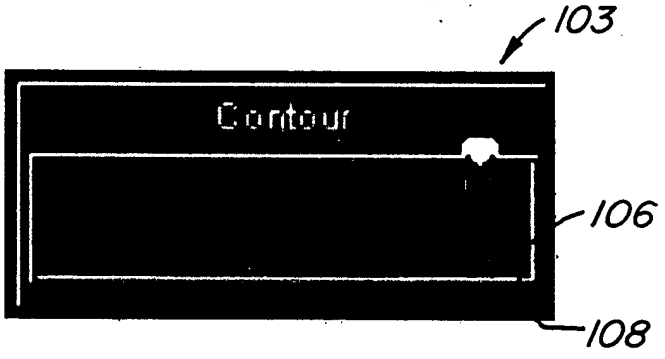

FIG. 1B.

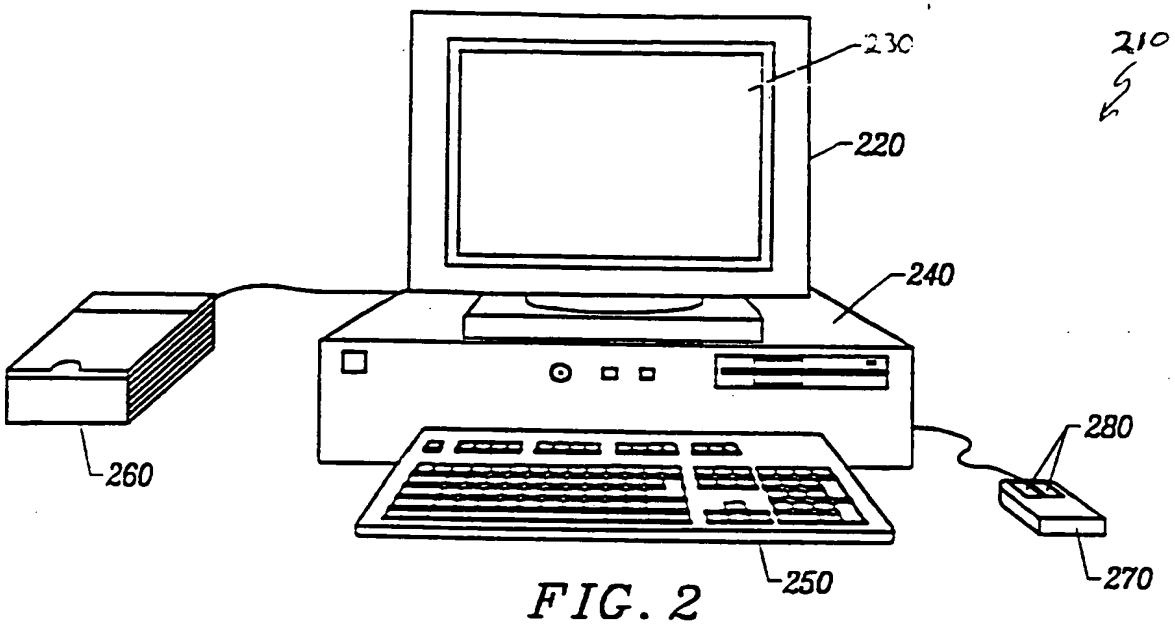
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FIG. 2

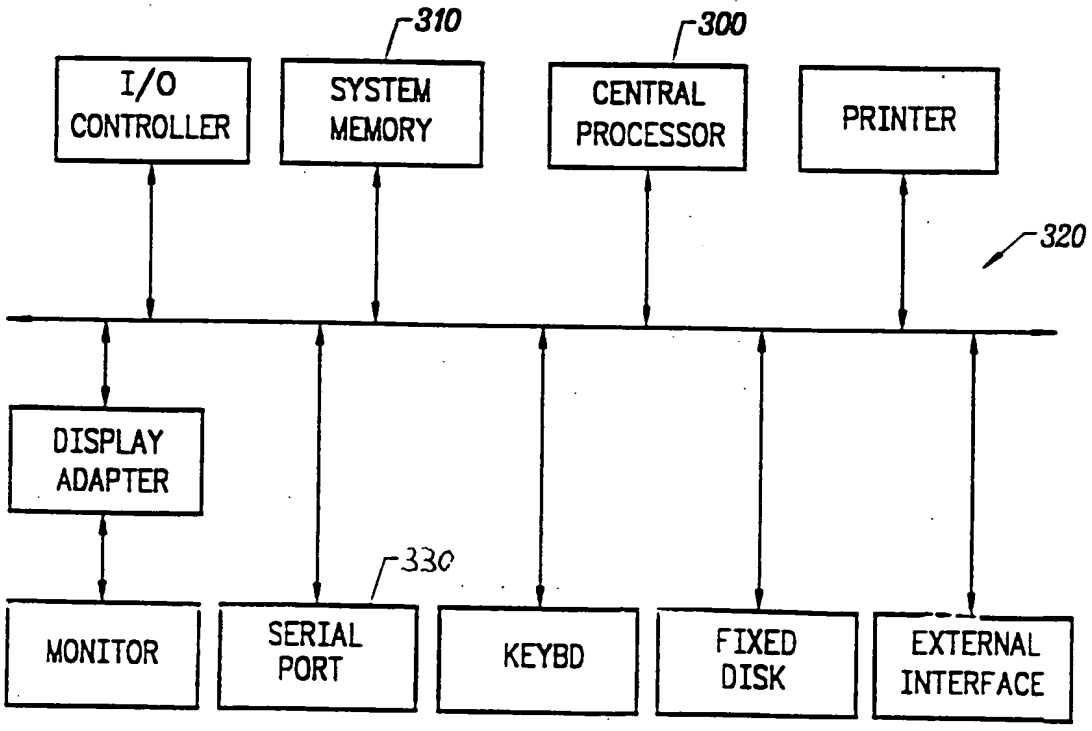
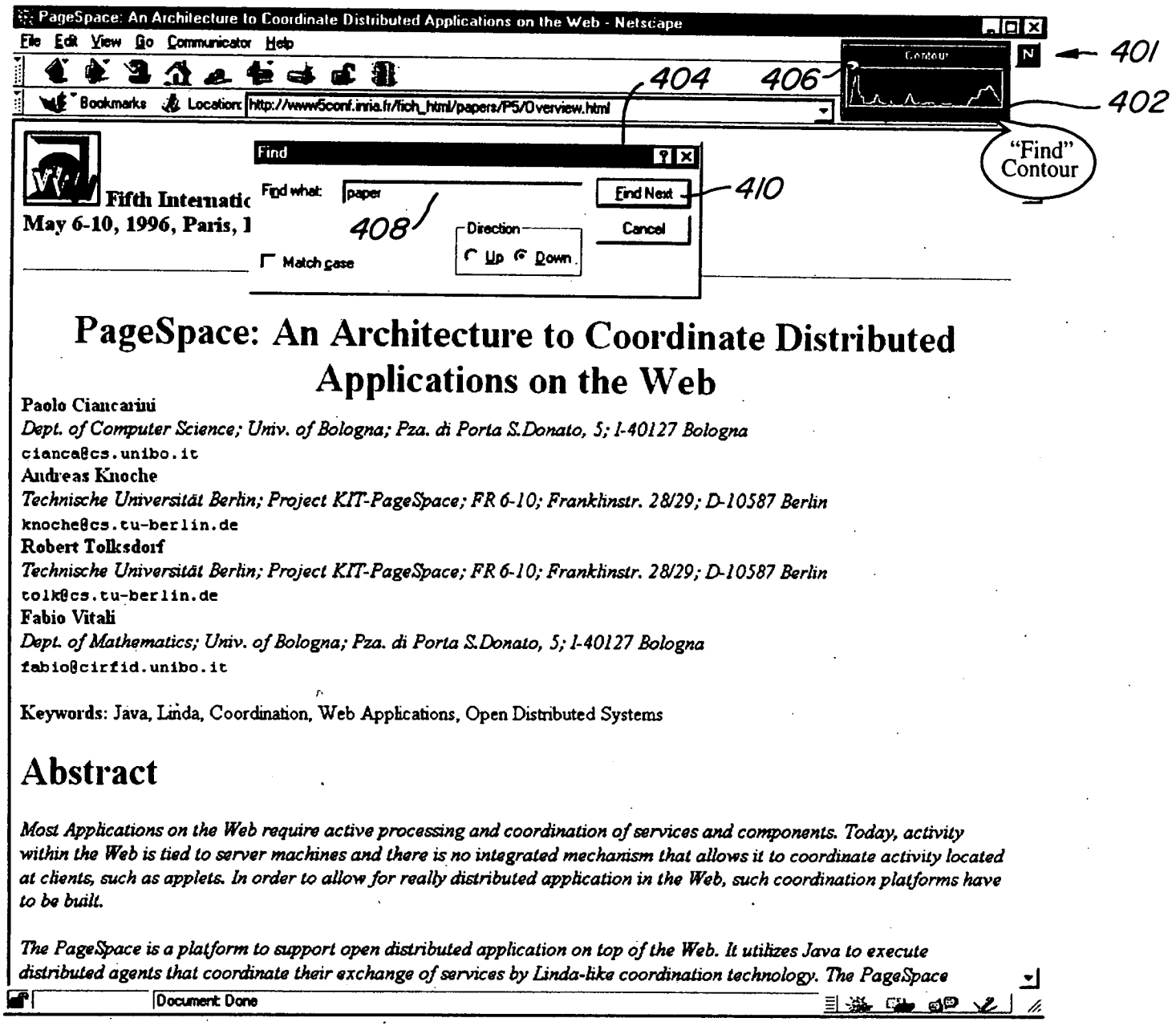

310
300
I/O CONTROLLER
SYSTEM MEMORY
CENTRAL PROCESSOR
PRINTER
320
DISPLAY ADAPTER
330
MONITOR
SERIAL PORT
KEYBD
FIXED DISK
EXTERNAL INTERFACE

FIG. 3


PageSpace: An Architecture to Coordinate Distributed Applications on the Web - Netscape
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Fifth Internatic
May 6-10, 1996, Paris, I
PageSpace: An Architecture to Coordinate Distributed Applications on the Web
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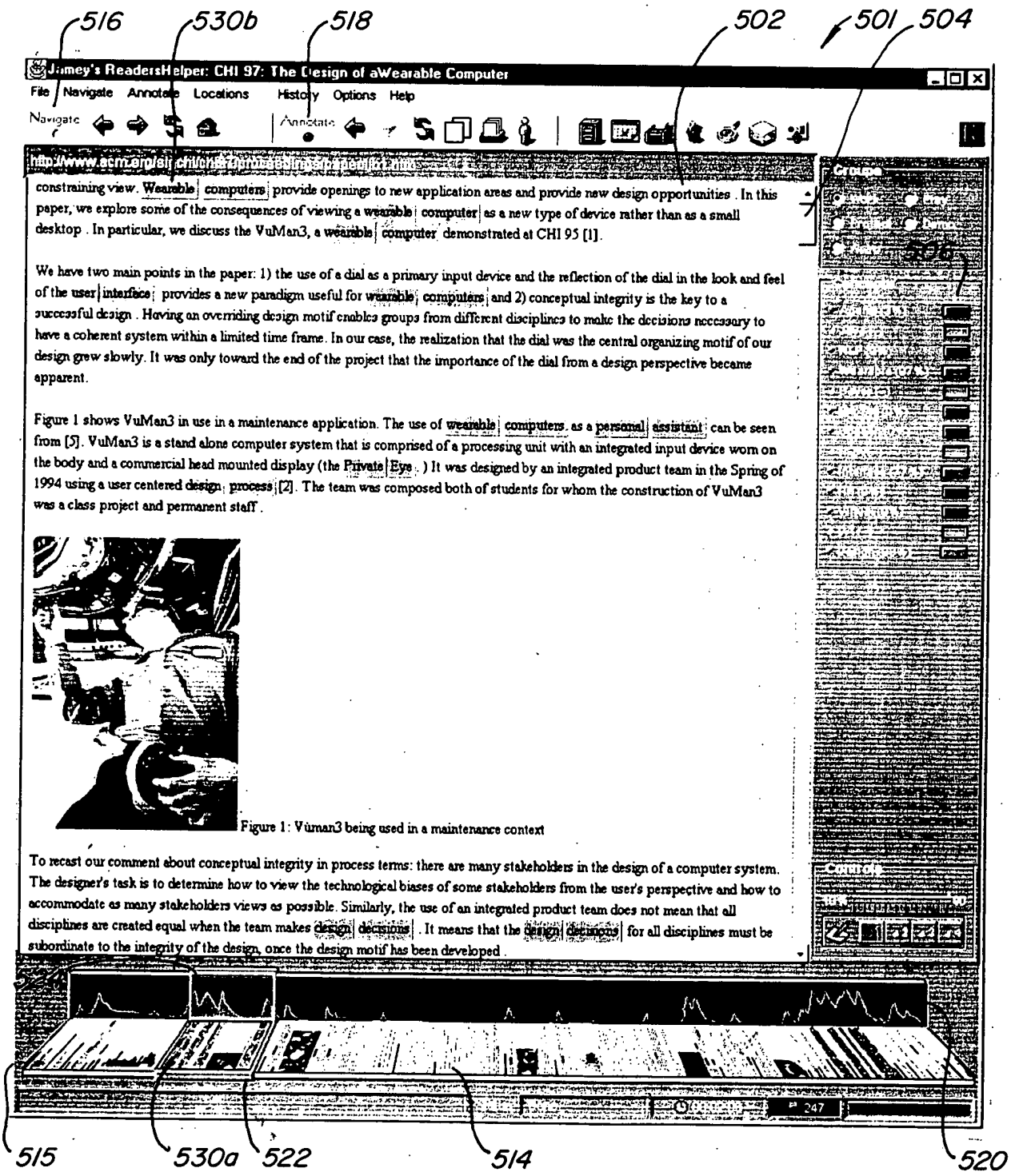
Keywords: Java, Linda, Coordination, Web Applications, Open Distributed Systems
Abstract
Most Applications on the Web require active processing and coordination of services and components. Today, activity within the Web is tied to server machines and there is no integrated mechanism that allows it to coordinate activity located at clients, such as applets. In order to allow for really distributed application in the Web, such coordination platforms have to be built.
The PageSpace is a platform to support open distributed application on top of the Web. It utilizes Java to execute distributed agents that coordinate their exchange of services by Linda-like coordination technology. The PageSpace
Document: Done

FIG. 4.


516
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Jamey's ReadersHelper: CHI 97: The Design of aWearable Computer
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constraining view. Wearable computers provide openings to new application areas and provide new design opportunities . In this paper, we explore some of the consequences of viewing a wearable computer as a new type of device rather than as a small desktop . In particular, we discuss the VuMan3, a wearable computer demonstrated at CHI 95 [1].
We have two main points in the paper: 1) the use of a dial as a primary input device and the reflection of the dial in the look and feel of the user interface provides a new paradigm useful for wearable computers and 2) conceptual integrity is the key to a successful design . Having an overriding design motif enables groups from different disciplines to make the decisions necessary to have a coherent system within a limited time frame. In our case, the realization that the dial was the central organizing motif of our design grew slowly. It was only toward the end of the project that the importance of the dial from a design perspective became apparent.
Figure 1 shows VuMan3 in use in a maintenance application. The use of wearable computers as a personal assistant can be seen from [5]. VuMan3 is a stand alone computer system that is comprised of a processing unit with an integrated input device worn on the body and a commercial head mounted display (the Private Eye). It was designed by an integrated product team in the Spring of 1994 using a user centered design process [2]. The team was composed both of students for whom the construction of VuMan3 was a class project and permanent staff .
Figure 1: Vuman3 being used in a maintenance context
To recast our comment about conceptual integrity in process terms: there are many stakeholders in the design of a computer system. The designer's task is to determine how to view the technological biases of some stakeholders from the user's perspective and how to accommodate as many stakeholders views as possible. Similarly, the use of an integrated product team does not mean that all disciplines are created equal when the team makes design decisions . It means that the design decisions for all disciplines must be subordinate to the integrity of the design, once the design motif has been developed .
Control
247
515
530a
522
514
520

FIG. 5.

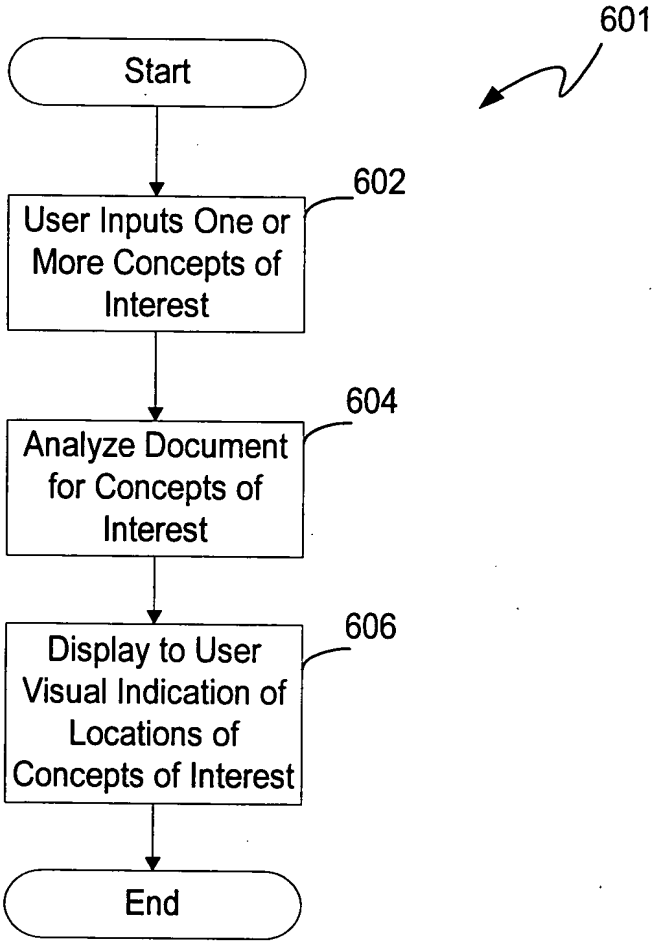

601
Start
602
User Inputs One or More Concepts of Interest
604
Analyze Document for Concepts of Interest
606
Display to User Visual Indication of Locations of Concepts of Interest
End

Fig. 6A

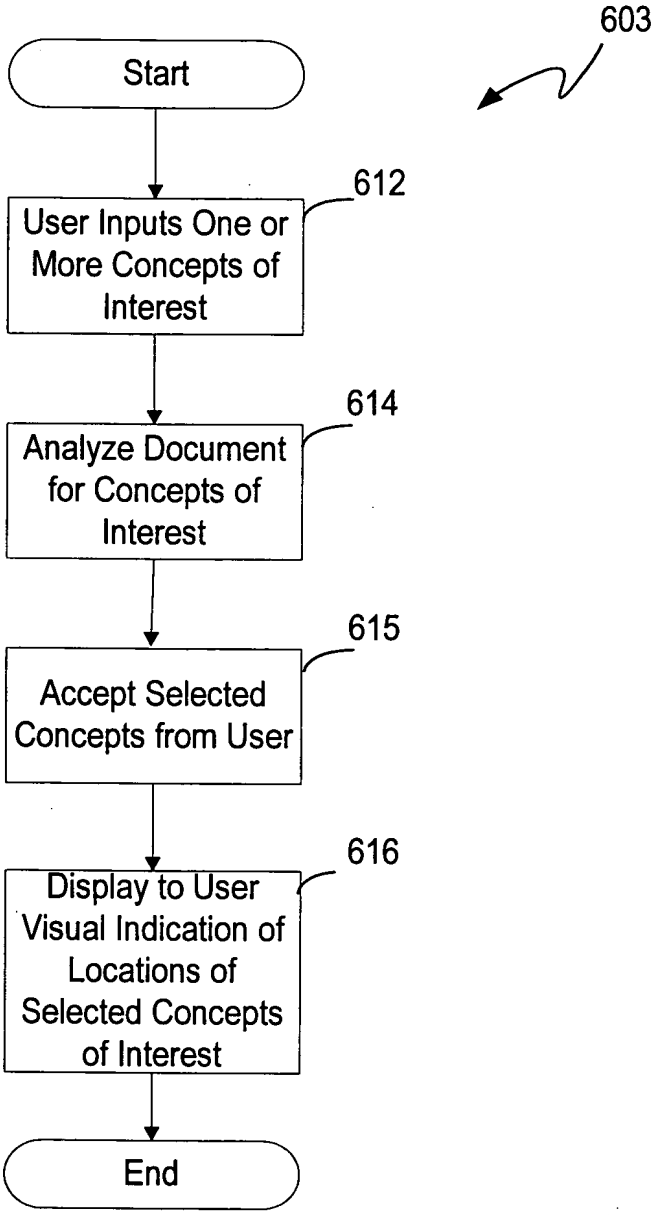
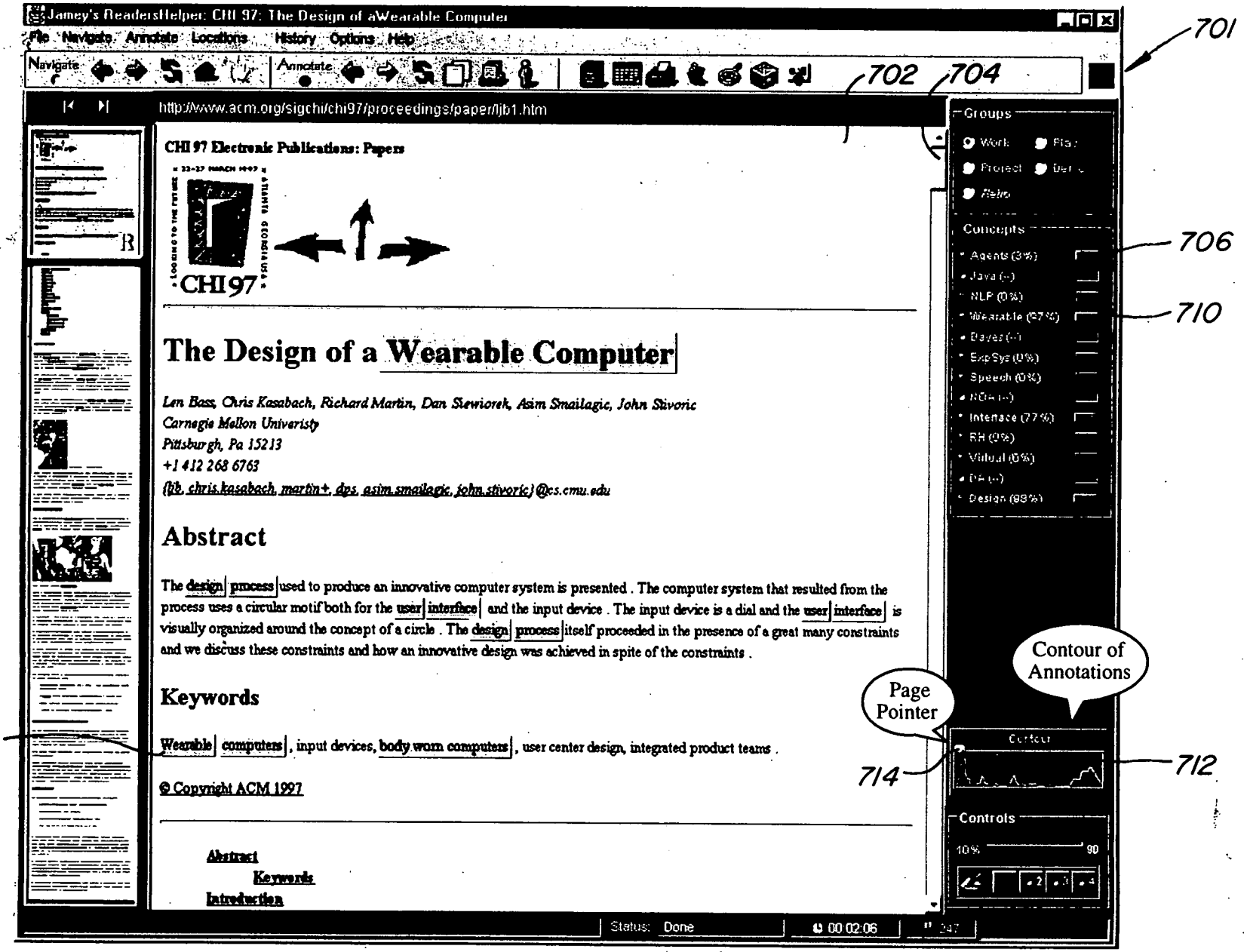


Fig. 6B


Jamey's ReadersHelper: CHI 97: The Design of aWearable Computer
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http://www.acm.org/sigchi/chi97/proceedings/paper/ljb1.htm
CHI 97 Electronic Publications: Papers
CHI97
The Design of a Wearable Computer
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Abstract
The design process used to produce an innovative computer system is presented . The computer system that resulted from the process uses a circular motif both for the user interface and the input device . The input device is a dial and the user interface is visually organized around the concept of a circle . The design process itself proceeded in the presence of a great many constraints and we discuss these constraints and how an innovative design was achieved in spite of the constraints .
Keywords
Wearable computers, input devices, body worn computers, user center design, integrated product teams .
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Abstract
Keywords
Introduction
Groups
Work
Concepts
Agents (3%)
Java (--)
NLP (0%)
Wearable (97%)
Speech (0%)
Interface (77%)
RH (0%)
Virtual (0%)
Design (98%)
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710
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Contour
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Status: Done
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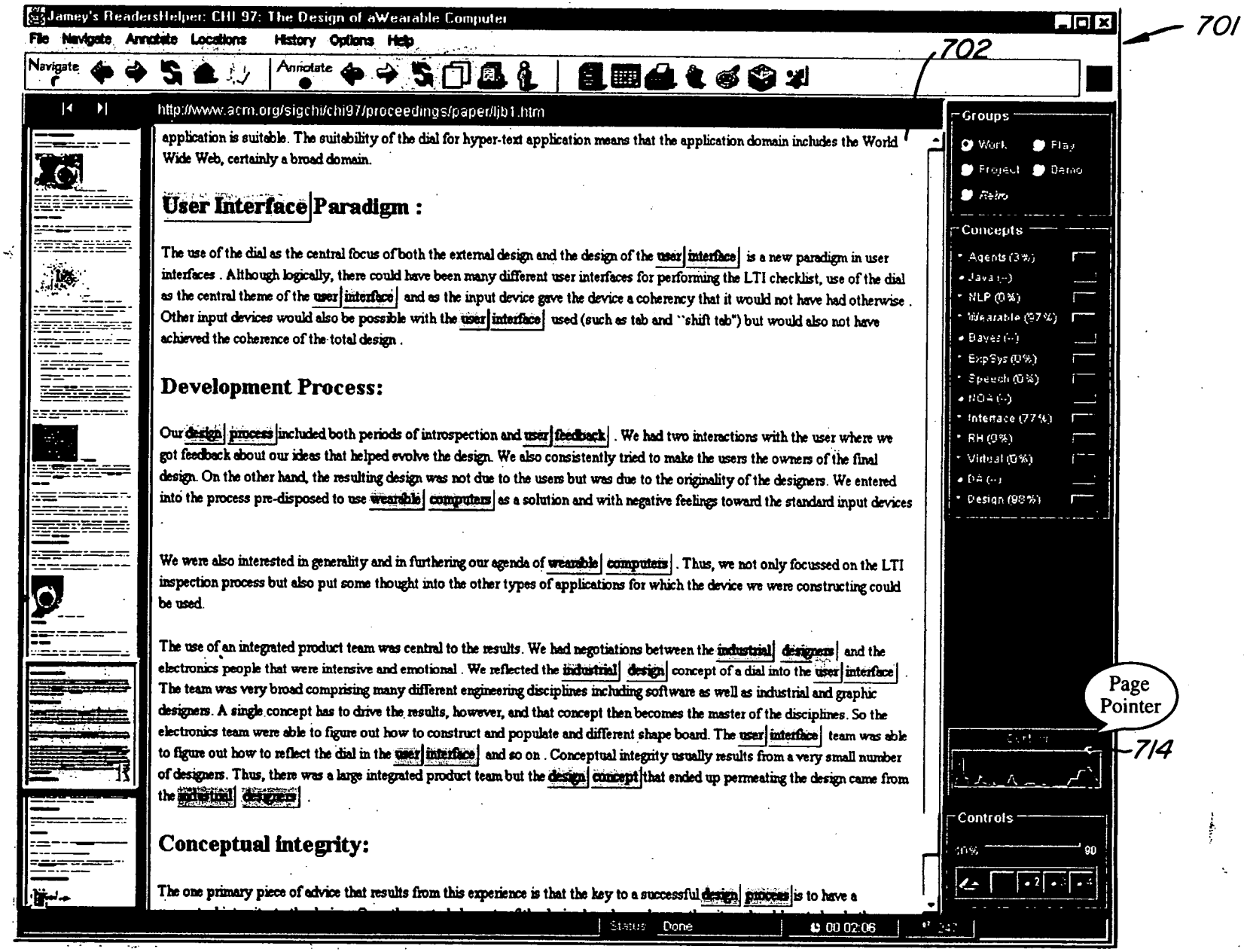
FIG. 7A.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application is suitable. The suitability of the dial for hyper-text application means that the application domain includes the World Wide Web, certainly a broad domain.
User Interface Paradigm :
The use of the dial as the central focus of both the external design and the design of the user interface is a new paradigm in user interfaces . Although logically, there could have been many different user interfaces for performing the LTI checklist, use of the dial as the central theme of the user interface and as the input device gave the device a coherency that it would not have had otherwise . Other input devices would also be possible with the user interface used (such as tab and "shift tab") but would also not have achieved the coherence of the total design .
Development Process:
Our design process included both periods of introspection and user feedback . We had two interactions with the user where we got feedback about our ideas that helped evolve the design. We also consistently tried to make the users the owners of the final design. On the other hand, the resulting design was not due to the users but was due to the originality of the designers. We entered into the process pre-disposed to use wearable computers as a solution and with negative feelings toward the standard input devices
We were also interested in generality and in furthering our agenda of wearable computers . Thus, we not only focussed on the LTI inspection process but also put some thought into the other types of applications for which the device we were constructing could be used.
The use of an integrated product team was central to the results. We had negotiations between the industrial designers and the electronics people that were intensive and emotional . We reflected the industrial design concept of a dial into the user interface . The team was very broad comprising many different engineering disciplines including software as well as industrial and graphic designers. A single concept has to drive the results, however, and that concept then becomes the master of the disciplines. So the electronics team were able to figure out how to construct and populate and different shape board. The user interface team was able to figure out how to reflect the dial in the user interface and so on . Conceptual integrity usually results from a very small number of designers. Thus, there was a large integrated product team but the design concept that ended up permeating the design came from the industrial designers .
Conceptual Integrity:
The one primary piece of advice that results from this experience is that the key to a successful design process is to have a
Groups
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Agents (3%)
Java (--)
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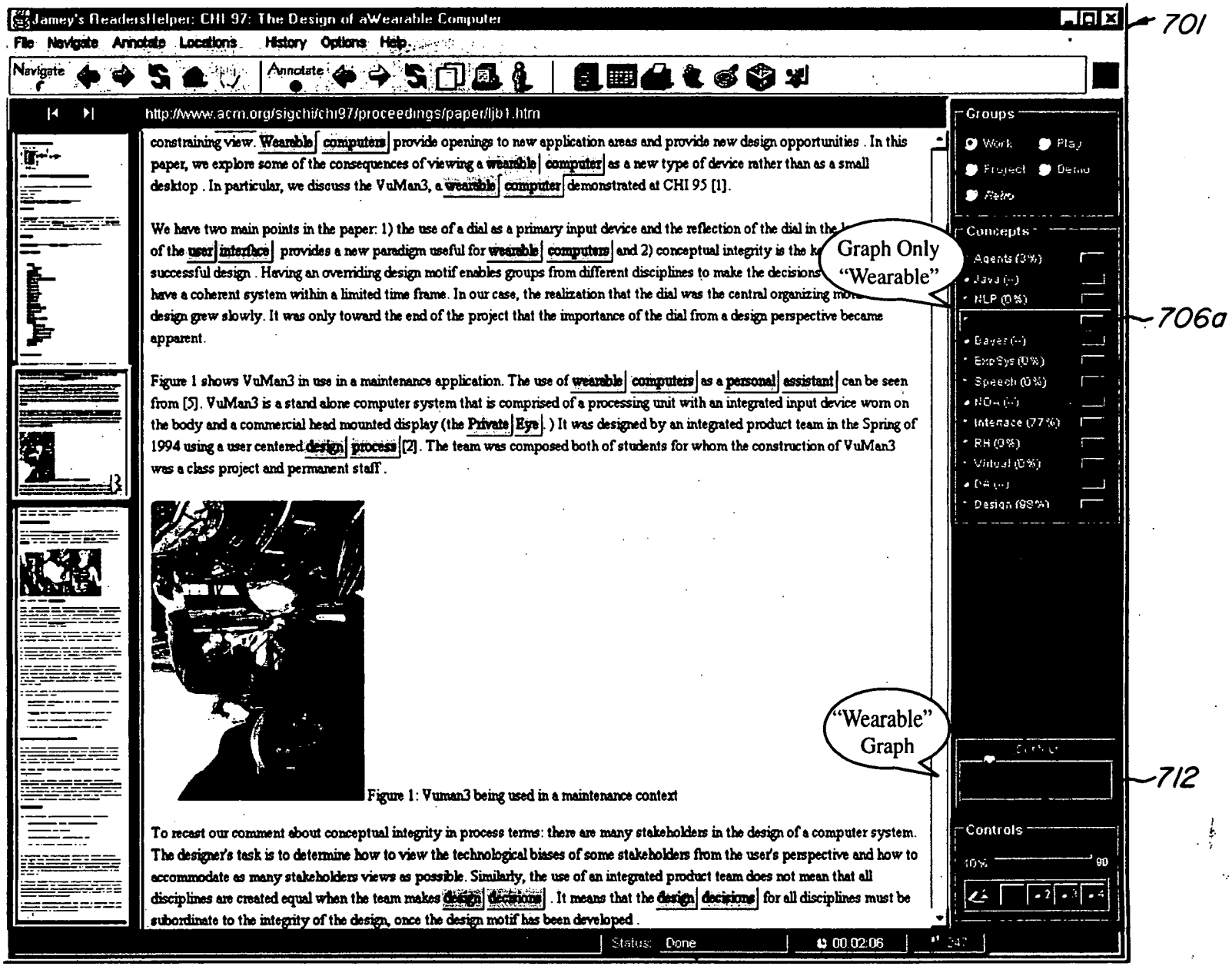
FIG. 7B.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Agents (3%)
NLP (0%)
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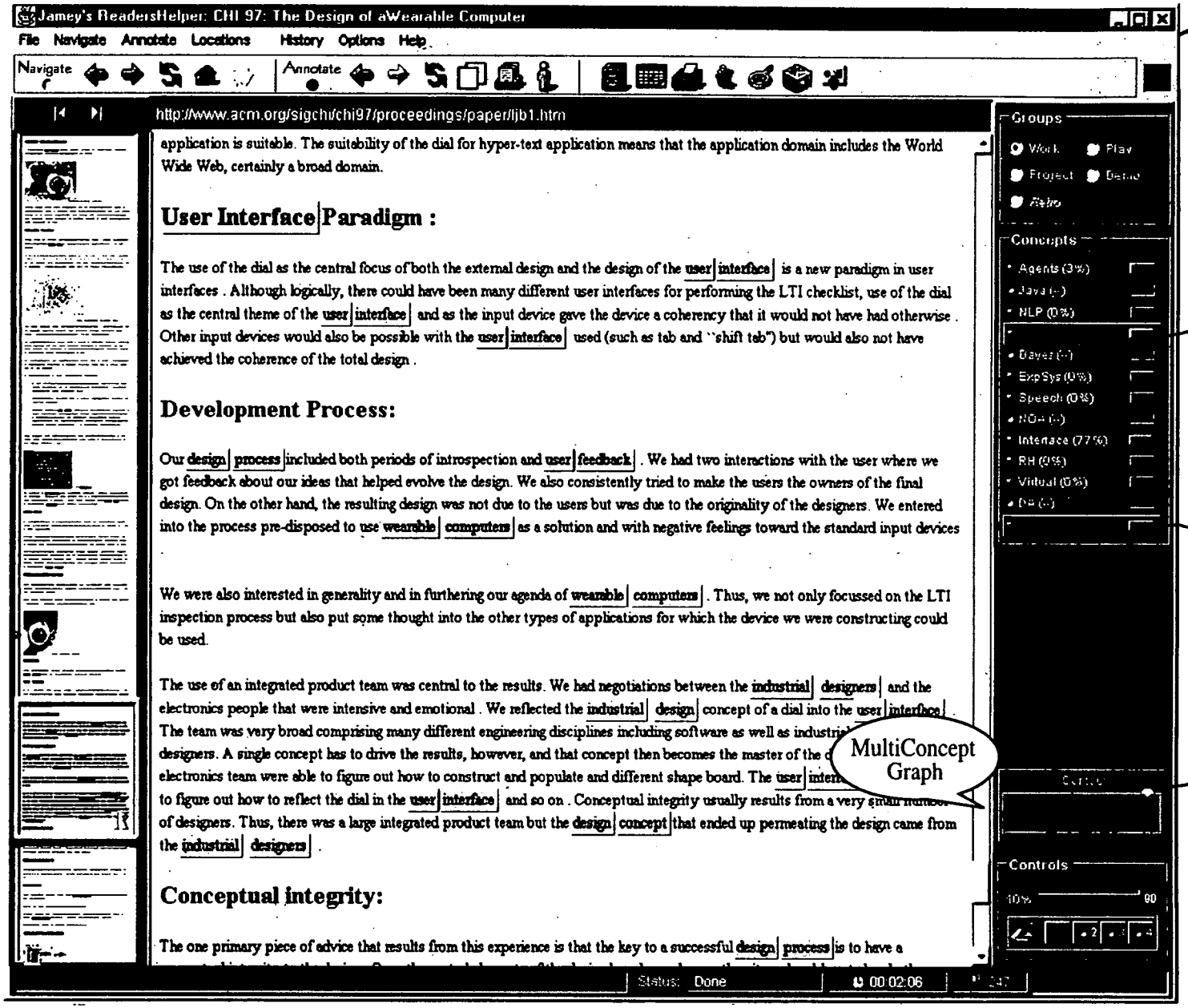
FIG. 7C.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http://www.acm.org/sigchi/chi97/proceedings/paper/ljb1.htm
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MultiConcept Graph
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The one primary piece of advice that results from this experience is that the key to a successful design process is to have a
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Agents (3%)
NLP (0%)
Interface (77%)
RH (0%)
Virtual (0%)
Controls
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FIG. 7D.